

**ABSTRACT**

Diagnostic memory images are obtained from a computer system when a system freezes or fails to take a memory dump when otherwise needed. The invention applies to computer systems that may be a partition (subset of the hardware under control of an operation system instance) or a full computer system.

Currently when a running X86 system freezes (no longer responds to input or raising of an NMI (Nonmaskable Interrupt) or fails to take a memory dump, it is very difficult to diagnose the problem without the ability to capture the contents of memory for analysis.